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1           UNITED STATES PATENT AND TRADEMARK OFFICE

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4           BEFORE THE BOARD OF PATENT APPEALS  
5           AND INTERFERENCES  
6  
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8           *Ex parte* KAZUHIRO KUSUDA  
9  
10

11           Appeal 2007-2892  
12           Application 09/783,096  
13           Technology Center 3700  
14  
15

16           Decided: November 24, 2008  
17  
18

19       *Before:* WILLIAM F. PATE, III, JENNIFER D. BAHR, and  
20       FRED A. SILVERBERG, *Administrative Patent Judges.*

21       SILVERBERG, *Administrative Patent Judge.*

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24  
25           DECISION ON APPEAL  
26  
27

28           STATEMENT OF THE CASE

29       Appellant appeals under 35 U.S.C. § 134 (2002) from a Final Office  
30       Action of claims 1-4, 6, 8-11, 13, 15-18, 20, and 22-29. We have  
31       jurisdiction under 35 U.S.C. § 6(b) (2002).

32

## SUMMARY OF DECISION

2 We AFFIRM.

## THE INVENTION

4 The Appellant's claimed invention is directed to a computerized  
5 racing game system (e.g., a horse racing game) having a plurality of tracks  
6 for racing running objects (horses) with changeable running abilities. Claim  
7 1, reproduced below, is representative of the subject matter on appeal.

1. A computerized game system, comprising:
    - a racing field formed on a predetermined board;
    - a physical running model, to which an inherent ability parameter varying in accordance with a given environment is assigned, caused to run a race on the racing field,
      - wherein the racing field comprises a plurality of tracks concurrently existing on said board on which the running model runs based on a current ability parameter, in accordance with the respective tracks; and
      - a physical passageway formed between the plurality of concurrently existing tracks so that the running model can enter and exit between the tracks, and the same running model can run in races on the plurality of tracks,
    - wherein said ability parameter is changed according to a movement of the running model from one of said plurality of tracks to another of said plurality of tracks through the physical passageway.

## THE REJECTIONS

27 The Examiner relies upon the following as evidence of  
28 unpatentability:

29	Girardin	US 4,874,177	Oct. 17, 1989
30	Filiczkowski	US 5,106,098	Apr. 21, 1992
31	Fongeallaz	US 5,186,460	Feb. 16, 1993
32	Ikeda	US 6,371,854 B1	Apr. 16, 2002
33	Nakagawa	EP 0 757 917 A1	Dec, 02, 1997
34			

The following rejections are before us for review:

1. Claims 1-4, 6, 8-11, 13, 15-18, 20, 22, 24-26 and 29 are rejected under  
2 35 U.S.C. § 103(a) (2004) as being unpatentable over Fongeallaz in  
3 view of Filiczkowski and Nagawa.
- 4
5. Claims 23 and 28 are rejected under 35 U.S.C. § 103(a) (2004) as  
6 being unpatentable over Fongeallaz in view of Filiczkowski and  
7 Nagawa, and further in view of Ikeda.
- 8
9. Claim 27 is rejected under 35 U.S.C. § 103(a) (2004) as being  
unpatentable over Fongeallaz in view of Filiczkowski and Nagawa,  
and further in view of Girardin.
- 10

## ISSUES

The issues before us are whether the Appellant has shown that the Examiner erred in rejecting claims 1-4, 6, 8-11, 13, 15-18, 20, 22, 24-26 and 29 over Fongeallaz in view of Filiczkowski and Nagawa; claims 23 and 28 over Fongeallaz in view of Filiczkowski, Nagawa and Ikeda; and claim 27 over Fongeallaz in view of Filiczkowski, Nagawa and Girardin. These issues turn on whether: (1) it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Fongeallaz, Filiczkowski, and Nagawa to have a physical passageway formed between concurrently existing tracks, wherein a running model's ability parameter is changed according to a movement of the running model from one track to the other track through a physical passageway; (2) Fongeallaz, Filiczkowski and Nagawa disclose concurrently existing tracks on a board, wherein the tracks have conditions that affect the running model differently; and (3) Fongeallaz, Filiczkowski and Nagawa disclose a turf

1 course and a dirt course, wherein the condition of the turf in the turf course  
2 and the condition of the soil in the dirt course can be adjusted.

3

4 **FINDINGS OF FACT**

5 We find that the following enumerated findings are supported by at  
6 least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d  
7 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for  
8 proceedings before the Office).

9 1. The Appellant's Specification discloses a computerized horse  
10 racing game system 1 comprising a racing field 10 formed on a  
11 predetermined board; a physical running model (a virtual horse) is  
12 assigned an inherent ability parameter which varies in accordance  
13 with a given environment (Spec. 8, ll. 16-26); the racing field  
14 comprises virtual tracks 12, 13; wherein the tracks are a turf track  
15 and a dirt track 10; and the running model runs in races on the  
16 tracks (Spec. 11, l. 25-Spec. 12, l. 6) based on a current ability  
17 parameter (Spec. 3, ll. 22-Spec. 4, l. 2).

18 2. The Appellant's Specification further discloses that the tracks 12,  
19 13 concurrently exist on the board; are concentric (Spec. 10, ll. 13-  
20 15 and Spec. 11, ll. 9-12); and have conditions that affect a running  
21 model's running ability differently (Spec. 11, ll. 12-14).

22 3. The Appellant's Specification still further discloses a physical  
23 passageway on the electronic display formed between the  
24 concurrently existing tracks so that the running model can enter  
25 and exit between the tracks 12, 13 (Spec. 11, ll. 23-25); and the  
26 running model's ability parameter is changed when the running

1 model moves from one of the tracks to the other of the tracks  
2 through the physical passageway (fig. 5) (Spec. 11, ll. 12-14).

3 4. The Appellant's Specification still further discloses that the tracks  
4 12, 13 can be formed on the field by image processing, and the turf  
5 conditions (e.g., depth, hardness, roughness) of the turf track 12  
6 and the soil conditions (e.g., viscosity) of the dirt track 13 can be  
7 arbitrarily adjusted (Spec. 23, l. 16-Spec. 24, l. 1).

8 5. Fongeallaz discloses a computerized horse racing game system 1  
9 comprising a computer 10, a racing field formed on a  
10 predetermined board that is electronically displayed on a screen 11,  
11 a game program 13, a physical running model (horse) H1 having a  
12 variable ability parameter (col. 5, ll. 41-50), the racing field  
13 comprises a track which mimics a race track (fig. 13) (col. 3, ll. 39-  
14 40), and wherein the game system 1 operates similarly to a manual  
15 board game with a computer generating random numbers  
16 corresponding to a roll of a dice (col. 4, ll. 58-62).

17 6. Fongeallaz further discloses that a choice of track conditions can  
18 be made available to players (col. 5, ll. 41-42 and 45-67).

19 7. Fongeallaz still further discloses that obstacles can be present on  
20 the track that would obstruct the steady running of a horse (col. 5,  
21 ll. 64).

22 8. Filiczkowski discloses a horse racing game comprising a manual  
23 game board 1; the game board having an inner turf track 2 and an  
24 outer dirt track 3 that are substantially concentric; the arrangement  
25 of the turf and dirt tracks simulate the shape of a typical race track  
26 (fig. 1B) (col. 2, ll. 49-54); a horse playing piece 30; Racing Cards

- 1           20, Weather Cards 40, Pick A Longshot Cards 50, Inquiry Cards  
2           60 and Photo Finish Cards 70 contain information regarding the  
3           movement of the horse playing piece; the horse playing piece  
4           having an ability determined by a horse card (col. 3, l. 67- col. 4, l.  
5           9, and col. 6, ll. 41-43); wherein the horse playing piece 30 moves  
6           around the manual game board due to the rolling of a die (col. 7, l.  
7           32).
- 8         9. Nagawa discloses a game simulation machine 1 comprising a  
9           plurality of objects resembling race horses, a track 5, a paddock 6,  
10          a pair of passageways 63 (63a, 63b) for connecting the track 5 and  
11          the paddock 6 (p. 4, ll. 14-20 and p. 6, ll. 33-36), wherein the track  
12          comprises a short track 5a and a long track 5b (fig. 2).
- 13       10. As Nagawa further discloses that the track used in a race is  
14           determined by the starting gate 17, the starting gate is considered a  
15           passageway between the tracks 5a and 5b (p. 5, ll. 10-12).
- 16       11. Ikeda discloses raising a racehorse (running models) by running  
17           races (col. 6, ll. 18-26).
- 18       12. Girardin discloses a horse racing game comprising a manual game  
19           board 10, an outer dirt track 14 and an inner turf track 16, a horse  
20           66, wherein the horse moves around the manual game board due to  
21           the rolling of a die (col. 17, l. 5).
- 22       13. Girardin further discloses selecting a horse from a plurality of  
23           horses that differ on the basis of inherent ability parameters  
24           (drawing a horse performance card 92), wherein the horses are  
25           grouped together according to the type of track (col. 6, l. 59-col. 8,  
26           l. 9; col. 14, ll. 16-26; Abstract; and fig 8).

1       14. Girardin still further discloses that when a horse 66 running on one  
2           type of track is transferred to another type of track the horse must  
3           have each of its moves adjusted accordingly (col. 14, ll. 26-31).

## PRINCIPLES OF LAW

6 Appellant has the burden on appeal to the Board to demonstrate error  
7 in the Examiner’s position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir.  
8 2006) (“On appeal to the Board, an applicant can overcome a rejection  
9 [under § 103] by showing insufficient evidence of *prima facie* obviousness  
10 or by rebutting the *prima facie* case with evidence of secondary indicia of  
11 nonobviousness.”) (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir.  
12 1998)).

13        “Section 103 forbids issuance of a patent when ‘the differences  
14      between the subject matter sought to be patented and the prior art are such  
15      that the subject matter as a whole would have been obvious at the time the  
16      invention was made to a person having ordinary skill in the art to which said  
17      subject matter pertains.’” *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727,  
18      1734 (2007). The question of obviousness is resolved on the basis of  
19      underlying factual determinations including (1) the scope and content of the  
20      prior art, (2) any differences between the claimed subject matter and the  
21      prior art, (3) the level of skill in the art, and (4) where in evidence, so-called  
22      secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18  
23      (1966). See also KSR, 127 S. Ct. at 1734 (“While the sequence of these  
24      questions might be reordered in any particular case, the [Graham] factors  
25      continue to define the inquiry that controls.”)

1        In *KSR*, the Supreme Court emphasized “the need for caution in  
2 granting a patent based on the combination of elements found in the prior  
3 art,” *id.* at 1739, and discussed circumstances in which a patent might be  
4 determined to be obvious. In particular, the Supreme Court emphasized that  
5 “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of  
6 *Hotchkiss*, 11 How. 248.” *KSR*, 127 S. Ct. at 1739 (citing *Graham*, 383 U.S.  
7 at 12), and reaffirmed principles based on its precedent that “[t]he  
8 combination of familiar elements according to known methods is likely to be  
9 obvious when it does no more than yield predictable results.” *Id.* The Court  
10 explained:

11        When a work is available in one field of endeavor,  
12 design incentives and other market forces can  
13 prompt variations of it, either in the same field or a  
14 different one. If a person of ordinary skill can  
15 implement a predictable variation, § 103 likely  
16 bars its patentability. For the same reason, if a  
17 technique has been used to improve one device,  
18 and a person of ordinary skill in the art would  
19 recognize that it would improve similar devices in  
20 the same way, using the technique is obvious  
21 unless its actual application is beyond his or her  
22 skill.

23        *Id.* at 1740. The operative question in this “functional approach” is thus  
24 “whether the improvement is more than the predictable use of prior art  
25 elements according to their established functions.” *Id.*

26        The Supreme Court stated that there are “[t]hree cases decided after  
27 *Graham* [that] illustrate the application of this doctrine.” *Id.* at 1739. “In  
28 *United States v. Adams*, ... [t]he Court recognized that when a patent claims  
29 a structure already known in the prior art that is altered by the mere  
30 substitution of one element for another known in the field, the combination

1 must do more than yield a predictable result.” *Id.* at 1739-40. “*Sakraida*  
2 and *Anderson’s-Black Rock* are illustrative – a court must ask whether the  
3 improvement is more than the predictable use of prior art elements according  
4 to their established function.” *Id.* at 1740.

5 The Supreme Court stated that “[f]ollowing these principles may be  
6 more difficult in other cases than it is here because the claimed subject  
7 matter may involve more than the simple substitution of one known element  
8 for another or the mere application of a known technique to a piece of prior  
9 art ready for the improvement.” *Id.* The Court explained:

10 Often, it will be necessary for a court to look to  
11 interrelated teachings of multiple patents; the  
12 effects of demands known to the design  
13 community or present in the marketplace; and the  
14 background knowledge possessed by a person  
15 having ordinary skill in the art, all in order to  
16 determine whether there was an apparent reason to  
17 combine the known elements in the fashion  
18 claimed by the patent at issue.

19 *Id.* at 1740-41. The Court noted that “[t]o facilitate review, this analysis  
20 should be made explicit.” *Id.* (citing *In re Kahn*, 441 F.3d 977, 988 (Fed.  
21 Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by  
22 mere conclusory statements; instead, there must be some articulated  
23 reasoning with some rational underpinning to support the legal conclusion of  
24 obviousness”). However, “the analysis need not seek out precise teachings  
25 directed to the specific subject matter of the challenged claim, for a court  
26 can take account of the inferences and creative steps that a person of  
27 ordinary skill in the art would employ.” *Id.*

28 The Federal Circuit recently concluded that it would have been  
29 obvious to combine (1) a mechanical device for actuating a phonograph to

1 play back sounds associated with a letter in a word on a puzzle piece with  
2 (2) an electronic, processor-driven device capable of playing the sound  
3 associated with a first letter of a word in a book. *Leapfrog Ent., Inc. v.*  
4 *Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (“[a]ccommodating  
5 a prior art mechanical device that accomplishes [a desired] goal to modern  
6 electronics would have been reasonably obvious to one of ordinary skill in  
7 designing children’s learning devices”). In reaching that conclusion, the  
8 Federal Circuit recognized that “[a]n obviousness determination is not the  
9 result of a rigid formula disassociated from the consideration of the facts of a  
10 case. Indeed, the common sense of those skilled in the art demonstrates why  
11 some combinations would have been obvious where others would not.” *Id.*  
12 at 1161 (citing *KSR*, 127 S.Ct. 1727, 1739 (“The combination of familiar  
13 elements according to known methods is likely to be obvious when it does  
14 no more than yield predictable results.”)). The Federal Circuit relied in part  
15 on the fact that Leapfrog had presented no evidence that the inclusion of a  
16 reader in the combined device was “uniquely challenging or difficult for one  
17 of ordinary skill in the art” or “represented an unobvious step over the prior  
18 art.” *Id.* (citing *KSR*, 127 S.Ct. at 1740-41). Applying modern electronics to  
19 older mechanical devices has been commonplace in recent years. *Id.*

20 When construing claim terminology in the United States Patent and  
21 Trademark Office, claims are to be given their broadest reasonable  
22 interpretation consistent with the specification, reading claim language in  
23 light of the specification as it would be interpreted by one of ordinary skill in  
24 the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir.  
25 2004).

1 It is well established that limitations not appearing in the claims  
2 cannot be relied upon for patentability. *In re Self*, 671 F.2d 1344, 1348  
3 (CCPA 1982).

## ANALYSIS

Appellant argues claims 1, 8, 15 and 24-26 as a group. As such, we select claim 1 as representative of the group, and claims 8, 15 and 24-26 will stand or fall with claim 1. In contesting the rejection of claim 28, Appellant simply relies on the arguments made with respect to the rejection of claim 1; as such claim 28 will stand or fall with claim 1. Appellant further argues claims 2, 3, 9, 10, 16 and 17 as a group. As such, we select claim 2 as representative of the group, and claims 3, 9, 10, 16 and 17 will stand or fall with claim 2. Appellant still further argues claims 4, 11 and 18 as a group. As such, we select claim 4 as representative of the group, and claims 11 and 18 will stand or fall with claim 4. Appellant still further argues claims 6, 13, and 20 as a group. As such, we select claim 6 as representative of the group, and claims 13 and 20 will stand or fall with claim 6. Appellant still further argues claims 22 and 23 as a group. As such, we select claim 22 as representative of the group, and claim 23 will stand or fall with claim 22.

37 C.F.R. § 41.37(c)(1)(vii) (2007). The Appellant still further argues claims 27 and 29 separately.

22 Fongeallaz discloses a computerized horse racing game system similar  
23 to Appellant's system, (Facts 5-7). We find that Fongeallaz does not show a  
24 plurality of tracks concurrently existing on the game board and a  
25 passageway formed between the tracks. Filiczkowski discloses a horse  
26 racing game comprising a manual game board 1 having an inner turf track 2

1 and an outer dirt track 3 that are substantially concentric (Fact 8). Nagawa  
2 discloses passageways 63a, 63b and 17 (Facts 9 and 10). Ikeda discloses  
3 raising a racehorse (running models) by running races (col. 6, ll. 18-26)  
4 (Fact 10). Girardin further discloses selecting a horse from a plurality of  
5 horses that differ on the basis of inherent ability parameters (drawing a horse  
6 performance card 92), wherein the horses are grouped together according to  
7 the type of track (col. 6, l. 59-col. 8, l. 9; col. 14, ll. 16-26; Abstract; and fig  
8 8) (Fact 12). We find that the claimed computerized game system relates to  
9 computerizing a manual game through programming. As such, we find that  
10 the person having ordinary skill in the art would have been a person having a  
11 high level of skill. In *Leapfrog* the Court of Appeals for the Federal Circuit  
12 held that “[a]ccommodating a prior art mechanical device that accomplishes  
13 that goal to modern electronics would have been reasonably obvious to one  
14 of ordinary skill in designing children's learning devices. Applying modern  
15 electronics to older mechanical devices has been commonplace in recent  
16 years.” *See Leapfrog* at 1161. We conclude that to combine the teachings  
17 of Fongeallaz, Filiczkowski and Nakagawa (claims 1-4, 6, 8-11, 13, 15-18,  
18 20, 22, 24-26 and 29), in addition Ikeda (claims 23 and 28), and in addition  
19 Girardin (claim 27) as set forth by the Examiner (Ans. 3-16) would have  
20 been obvious at the time the invention was made to a person having ordinary  
21 skill in the art.

22 Regarding claims 1, 4 and 6, Appellant admits that Filiczkowski  
23 discloses two concurrently existing independent tracks, one labeled turf  
24 track 2 and the other labeled dirt track 3, which are substantially concentric  
25 (Br. 17). Appellant argues, however, that there is no suggestion how the  
26 Filiczkowski manual board game would be computerized (claim 1) (Br. 17);

1 there is no teaching how one would provide two separate types of tracks in  
2 an electronic game environment (claim 4) (Br. 25); and there is no teaching  
3 of forming concentric racing courses electronically (claim 6) (Br. 26).

4 Combining the teachings of Fongeallaz and Filiczkowski, including  
5 computerizing the manual game board disclosure of Filiczkowski, would  
6 have been obvious to a person having ordinary skill in the art. *See Leapfrog*  
7 at 1161.

8 Appellant further argues that that there is no teaching of a physical  
9 passageway formed between the plurality of concurrently existing tracks,  
10 wherein the running model's (horse) ability parameter is changed according  
11 to movement of the running model from one track to the other track through  
12 the physical passageway. Nagawa discloses passageways 63 (63a, 63b)  
13 (Fact 9) and 17 (Fact 10) and the incorporation of such in Fongeallaz is  
14 merely a matter of programming, which would have been obvious at the  
15 time the invention was made to a person having ordinary skill in the art.

16 Further, regarding claims 22 and 29; appellant argues that the  
17 Examiner has erred in that there is no teaching wherein the condition of the  
18 turf in the turf course (e.g., depth , hardness, roughness) and the condition of  
19 the soil in the dirt course (e.g., viscosity) can be adjusted (Br. 26 and 27).  
20 These turf conditions are in the Appellant's specification, but are not called  
21 for in the claims. They cannot be relied upon for patentability (Br. 27). *See*  
22 *Self* at 1348.

23 Regarding claim 27, Appellant argues that while Girardin discloses  
24 information about the horses and the track conditions, the game is not  
25 operated under computer control (Br. 28-30). Again, combining the  
26 teachings of Fongeallaz,, Filiczkowski, Nagawa and Girardin, including

1 computerizing the manual game board disclosure of Girardin, would have  
2 been obvious to a person having ordinary skill in the art. *See Leapfrog* at  
3 1161. We agree with the Examiner's analysis (Ans. 3-16) and find that  
4 Appellants have not persuaded us that the Examiner has erred.

5 Regarding claim 2, Appellant argues that the Examiner has erred in  
6 that Fongeallaz does not show one of the tracks having a region wherein the  
7 horse would perform steady running and have its current ability parameter  
8 maximized. Fongeallaz discloses that obstacles can be present on the track  
9 that would obstruct the steady running of a horse (col. 5, ll. 64) (Fact 7). We  
10 agree with the Examiner's analysis (Ans. 4, 5 and 15) and find that the  
11 region of the track where there are no obstacles is an area the horse would  
12 perform steady running and have its current ability parameter maximized.

13  
14 CONCLUSION OF LAW

15 We conclude that the Appellant has not shown that the Examiner  
16 erred in rejecting claims 1-4, 6, 8-11, 13, 15-18, 20, 22, 24-26 and 29 under  
17 35 U.S.C. § 103(a) as being unpatentable over Fongeallaz in view of  
18 Filiczkowski and Nagawa; claims 23 and 28 under 35 U.S.C. § 103(a) as  
19 being unpatentable over Fongeallaz in view of Filiczkowski and Nagawa,  
20 and further in view of Ikeda; and claim 27 under 35 U.S.C. § 103(a) as being  
21 unpatentable over Fongeallaz in view of Filiczkowski and Nagawa, and  
22 further in view of Girardin.

23  
24 DECISION

25 The decision of the Examiner to reject claims 1-4, 6, 8-11, 13, 15-18,  
26 20, 22, 24-26 and 29 over Fongeallaz in view of Filiczkowski and Nagawa;

Appeal 2007-2892  
Application 09/783,096

1 claims 23 and 28 over Fongeallaz in view of Filiczkowski, Nagawa and  
2 Ikeda; and claim 27 over Fongeallaz in view of Filiczkowski, Nagawa and  
3 Girardin is affirmed.

4 No time period for taking any subsequent action in connection with  
5 this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

6

7 AFFIRMED

8

9 vsh

10

11  
12 SUGHRUE-265550  
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